

WHAT IS CLAIMED IS:

1. A method of preparing a flaked R-T-E cereal of enhanced appearance having discernible grain bits, comprising the steps of:
 - 5 A. providing free cereal grain pieces having a particle size of about 0.5 to 2.5 mm and a moisture content of at least 20%;
 - B. forming the grain pieces into a cooked cereal dough in a cooker extruder to provide a cooked
10 cereal dough having discernible grain bits, said forming step including adding sufficient amounts of moisture to provide the cooked cereal dough with a moisture content of about 21 to 35%;
 - 15 C. immediately thereafter, subjecting the cooked cereal dough to a second cooking step at a temperature of about 121 to about 180°C (250 to 380°F) for about 15 to 45 minutes to form an extended cooked cereal dough having discernible
20 grain bits dispersed therein.
2. The method of claim 1 additionally comprising the steps of:
 - D. forming the cooked cereal dough in into pellets
each weighing about 0.25 to 10g; and
 - 25 E. drying the pellets to a moisture content of about 7 to 22%.
3. The method of claim 2 additionally comprising the steps of, after drying the pellets and before flaking:tempering the dried pellets for about 30 to
30 90 minutes to form tempered dried pellets;

flaking the pellets to form wet flakes having a moisture content of about 16 to 20% and a thickness of 380 to 840 μm (0.015 to 0.035 in); and,

toasting the wet flakes to form a toasted R-T-E flake cereal having a moisture content of about 2 to 4% and having discernible grain bits dispersed therein.

4. The method of claim 1 wherein step A comprises the substeps of:

preparing a raw cereal premix comprising at least two grain ingredients selected from the group consisting of wheat, corn (maize), oats, rye, triticale and mixtures thereof and wherein at least the wheat is provided in the form of cracked berries; and

admixing sufficient amounts of water and/or hot moisture containing ingredients to provide the preblend with a moisture content of about 20 to 25%,

5. The method of claim 1 wherein the cereal grain includes corn.
6. The method of claim 1 wherein in steps B and C are practiced to provide the dough with a Specific Mechanical Energy ("SME") value of less than 30 watt-hours/kg of dough.
7. The method of claim 4 wherein the raw premix additionally includes a bran ingredient.
8. The method of claim 6 wherein the cooked cereal dough includes sufficient amounts of nutritive carbohydrate ingredients to provide a total sugar content of about 1 to 25% (dry weight).

9. The method of claim 7 wherein at least a portion of the bran is supplied by white wheat bran.
10. The method of claim 6 wherein the dough includes a member selected from the group consisting of
5 sugar(s), salt, minerals, vitamins, flavor and mixtures thereof.
11. The method of claim 10 wherein the agitation in step A is intermittent.
12. The method of claim 11 whereby said toasted R-T-E
10 flake cereal having discernible grain fragments at least 1 mm² in area in the amount of at least 30 per gram of flakes.
13. The method of claim 12 wherein Step B is practiced in a twin screw extruder and the cooking step has a
15 duration of about 1-3 minutes.
14. The method of claim 13 wherein step C is practiced in a cooker having an Archimedes screw operated at about 1-10 rpm for about 15 or 45 minutes.
15. The method of claim 14 additionally comprising the
20 step of applying a topical presweetener coating.
16. The method of claim 15 wherein the weight ratio of topical presweetener coating to cereal flake ranges from about 2:100 to 50:100.
17. The product prepared by the method of claim 1.
- 25 18. The product prepared by the method of claim 6.
19. The product prepared by the method of claim 14.
20. The process of claim 14 additionally comprising a dried pellet heating step prior to flaking.
21. The process of claim 20 comprising about 0.1 to 2%
30 salt.

22. The process of claim 14 wherein the finished flake has at least 35 discernible bits of at least 1 mm² per grain.
23. The process of claim 22 wherein the grain includes corn (maize).
24. The process of claim 22 wherein the cooked cereal dough has a total fiber content of at least 3g/oz.
25. The method of claim 1 additionally comprising the step of forming the pellets into finished grain based snacks.
26. The method of claim 25 wherein the forming step includes rapidly heating the pellets to provide puffed finished grain based snacks.
27. The method of claim 26 wherein the rapid heating includes deep fat frying to provide fried puffed grain based snacks having a fat content of about 15 to 35% by weight.
28. The method of claim 27 wherein the rapidly heating includes microwave heating.
29. The product prepared by the method of claim 25.
30. An improved food product fabricated from a cooked cereal dough, at least a portion being from whole wheat, having discernible cooked grain bits dispersed there through at least 1 to 2 mm² in area in the amount of at least 30 per gram.
31. The food product of claim 30 wherein the moisture content is about 1 to 4%.
32. The food product of claim 30 wherein the product is in the form of a flaked R-T-E cereal.

33. The food product of claim 32 having a presweetener coating.
34. The food product of claim 31 in the form of a puffed grain snack.
- 5 35. The food product of claim 34 having a fat content of about 1 to 35%.
36. The food product of claim 35 having a fat content of about 15 to 30%.
37. The food product of claim 31 in the form of a mini
10 biscuit.
38. The method of claim 33 wherein the presweetener coating includes a high potency sweetener.
39. The method of claim 23 wherein in step B, the cooked cereal dough includes about 1 to 10% (dry weight
15 basis) of an edible fatty triglyceride.
40. A method of preparing a flaked R-T-E cereal of enhanced appearance having discernible grain bits, comprising the steps of:
- A. providing a steeped raw premix including cereal
20 grain pieces with added water with agitation and to provide an uncooked premix comprising steeped grain pieces having a moisture content of at least 20%;
- B. forming the steeped grain pieces into a cooked
25 cereal dough in a cooker extruder to provide a cooked cereal dough having discernible grain bits, said forming step including adding sufficient amounts of moisture to provide the cooked cereal dough with a moisture content of
30 about 21 to 35%;

- C. immediately thereafter, subjecting the cooked cereal dough having a moisture content of about 25 to 35% to a second cooking step at a temperature of about 121 to about 180°C (250 to 380°F) for about 20 to 45 minutes to form an extended cooked cereal dough having discernible grain bits dispersed therein;
- D. forming the cooked cereal dough in pellets each weighing about 0.25 to 10g;
- 10 E. drying the pellets to a moisture content of about 7 to 14%.